

HABS Documentation in the National Parks

Joseph D. Balachowski

During the summer of 1992, HABS undertook the documentation of four diverse National Park Service sites: Melrose and the Johnson-McCallum House at Natchez National Historical Park, MS; Painted Desert Inn at Petrified Forest National Park, AZ; three houses belonging to the families of Harry S and Elizabeth V. "Bess" Wallace Truman at Harry S Truman National Historic Site, Independence, MO; and Passage Island Light and Rock Harbor Light at Isle Royale National Park, MI. Each site presented unique challenges to the recording teams.

Melrose, built in 1845 in the Greek Revival style, was the home of attorney and planter John T. Murran. The house contains many original mid-19th century furnishings. As an excellent example of the architecture of Natchez, Melrose represents the zenith of planter society in the pre-Civil War South. The 80-acre estate includes the 14,472-square-foot main house, 12 original outlying

structures—including kitchen and dairy dependencies, slave quarters, and barns—and approximately 40 acres of wooded, landscaped park land and the remains of formal gardens and orchards. The National Park Service (NPS) acquired the site in October 1988.

The William Johnson-John McCallum Houses are part of Natchez NHP and are located in downtown Natchez. William Johnson, a free black, was a successful businessman and diarist in antebellum Mississippi.

A team of eight architects and one historian led by Professor John P. White of Texas Tech University was charged with producing a full set of existing-condition measured drawings of the main house, the kitchen dependencies, and the Johnson McCallum House. In 12 weeks, the team drew approximately 30 sheets of plans, elevations, sections and details, following the typically intensive HABS regimen of sketching, measuring, producing preliminary pencilings on vellum, and final inkings on drafting film. The team historian researched the construction history of the Johnson-McCallum Houses, and HABS architectural photographer Jack E. Boucher shot over 75 large-format images of all the structures at both sites.

Architects who undertake the graphic documentation of historic structures occasionally have the good fortune of finding original design drawings to use as field notes, and to guide them through restoration, adaptive reuse, and other projects involving buildings' structure and fabric. The Natchez team, however, started from scratch on the Melrose buildings; field notes and pencilings of Johnson-McCallum provided by architects from the Southeast Regional Office of the NPS accelerated their progress on those structures.

In addition to working in the heat and humidity of a Mississippi summer, the team relied on their supervisor to schedule their activities around half-hourly house tours, maintenance and repair, and the necessarily high security requirements of Melrose. Because windows and doors tend to remain closed, natural ventilation of the house is curtailed, resulting in great demands on mechanical systems. The HABS drawings and photographs will enable systems engineers and maintenance workers to plan the imminent installation of a new HVAC system, and to repair or replace existing electrical, plumbing, structural and ornamental materials.

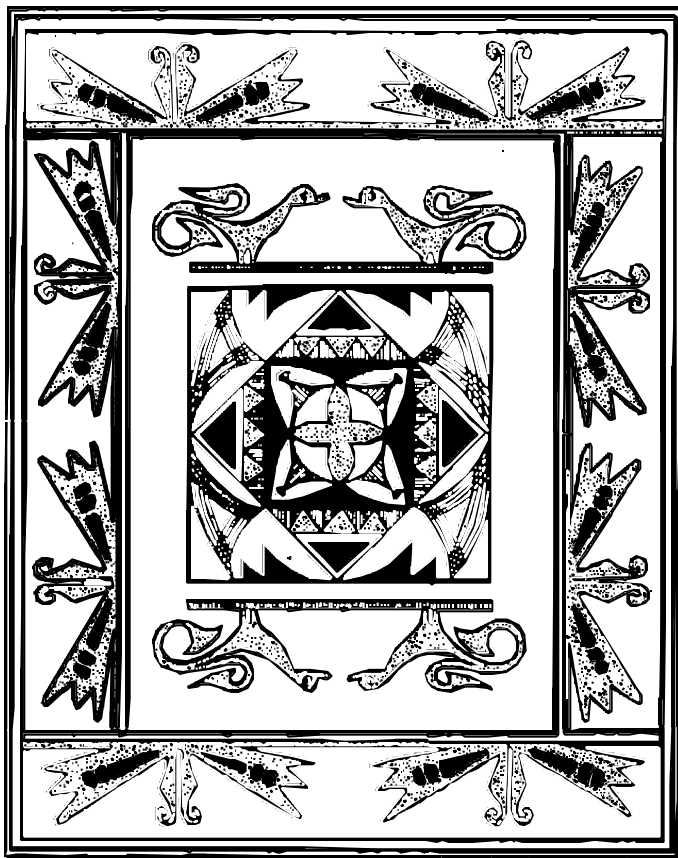
The Johnson-McCallum House drawings will aid NPS architects in stabilizing two structures that at this time rely on each other for lateral support. Urban archeological work is also reflected in the HABS documentation, and as with the Melrose drawings, will aid in future interpretation of the site.

The presence of the HABS team also added a new dimension to the cultural awareness of Natchezians, who will now view the grand architecture of their city both as monuments to the antebellum South, as well as to the ingenuity and stylistic sophistication of the builders of Natchez. The primary contacts for the project were Billy Garrett, regional historical architect, and Sarah Boykin, project architect, of the Southeast Regional Office.

The documentation of the Painted Desert Inn was initiated by Paul Cloyd, historical architect, of the Denver Service Center (DSC) and the Western Regional Office of NPS in response to several critical conditions. Heavy spring rains further damaged a badly leaking roof, and



Melrose, Natchez NHP, Natchez, MS. View of south facade. Jack E. Boucher, photographer, 1992, HABS.



Skylight panel, Painted Desert Inn, Petrified Forest National Park. Delineated by Patrick B. Guthrie, 1992, HABS.

exacerbated constant building shifts due to sub-surface water saturation and drainage cycles. Additionally, the Inn as constructed from 1937-40 did not successfully integrate remains of a 1920s structure of stone, petrified wood and mud mortar. When the NPS acquired Painted Desert Inn in 1936, the bentonite clays under the Inn had already been expanding and contracting for years. Finally, years of underuse and neglect of portions of the Inn motivated calls for its demolition. Visible evidence of building deterioration includes major cracks in exterior and interior walls and water damage to surface finishes, ornamentation and furniture. Numerous strain gauges installed to monitor wall movement can be found throughout the building.

While previous design and as-built drawings were available, they were incomplete and not considered accurate. A five-person team under New York architect Jorge Sein supplemented these drawings with a new set of field notes and ink-on-drafting film drawings for future rehabilitation. Western Region historian Dewey Livingston produced large-format photography and a written historical report to be incorporated into a historic structures report.

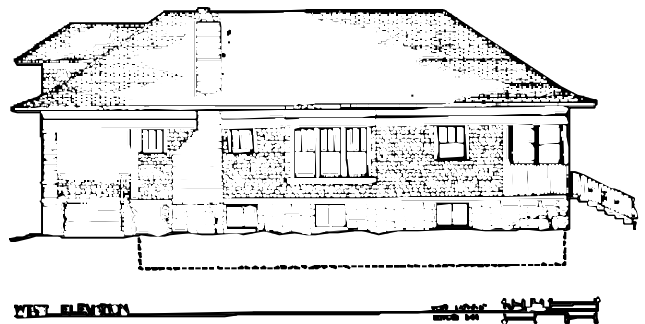
The greatest challenge to accurately recording the Painted Desert Inn lies in its "organic" pueblo revival form. Structures like the Inn—whether constructed of stone and adobe or framed with stud walls and stucco—mimic pre-Columbian constructions that used irregular, natural building materials assembled without the benefit of sophisticated surveying or measuring devices. Therefore, an extensive system of datum or control lines

must be established, and some irregular features must be rendered approximately, rather than exactly.

Painted Desert Inn was designed by NPS architect Lyle E. Bennett in 1937, opened for business in 1940, but closed down for the duration of World War II. In 1946 the Fred Harvey Company took over the operation, and the following year brought their own architect, Elizabeth Jane Colter, to upgrade the building. She in turn hired Hopi artist Fred Kabotie to paint a number of murals depicting Hopi life; these murals survive to the present day. Since 1963, when Fred Harvey ceased operations there, Petrified Forest National Park has used the Inn as a museum, interpretive space and meeting hall. The Inn also appears briefly in the 1940 John Ford film, "The Grapes of Wrath."

HABS added to its collection of sites associated with presidents of the United States by documenting three homes at the Harry S Truman National Historic Site. This project was initiated by Andy Ketterson, chief of cultural resources, and Craig Kenkel, historical architect, of the Midwest Regional Office of NPS to comprehensively document all structures and sites that contribute to the cultural diversity of the region. The Frank and George Wallace Houses belonged to the family of the President's wife; the Nolan-Haukenberry House belonged to President Truman's aunt.

These properties were recently acquired by the NPS as part of an historic district adjacent to the home occupied by the Trumans during his presidency. The Wallace Houses are early-20th-century bungalows of the type found throughout the midwest and west; the Nolan-Haukenberry House is a late-19th-century Italianate Victorian. The five-person team led by Washington, DC, architect Ellen Goldkind produced a complete set of existing-condition drawings that will be used to plan the rehabilitation of the homes. Creating graphic documentation was especially critical for the Nolan-Haukenberry House because of its weakened structural and material



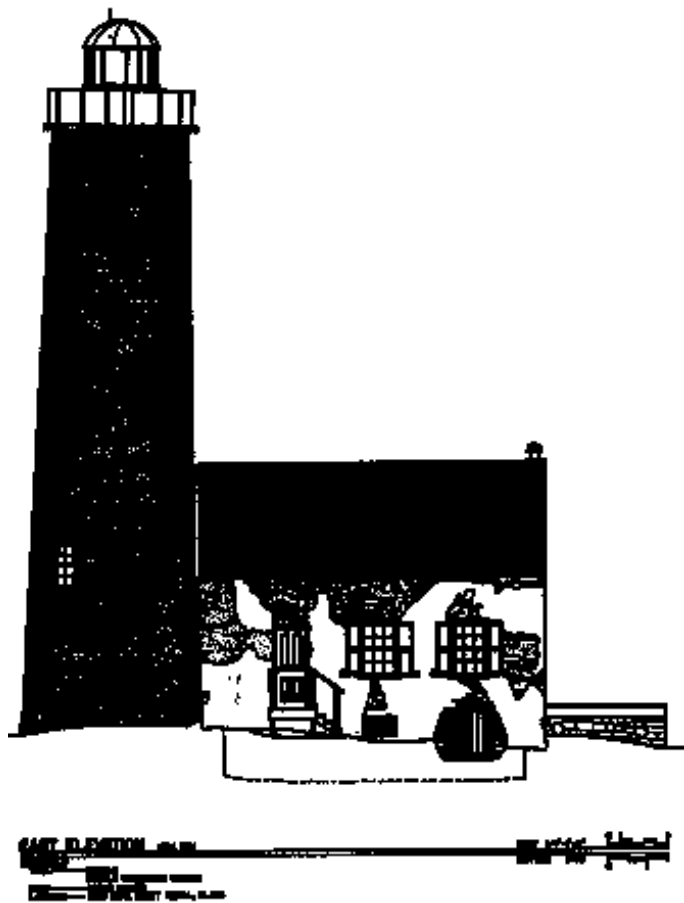
West elevation, Frank Wallace House, Harry S Truman National Historical Site. Delineated by Xuan-Hong Ho, 1992, HABS.

condition. The Wallace Houses—used as studio space and living quarters by the team—will eventually be upgraded for Park Service housing. Plans for the Nolan-Haukenberry House include future curatorial office space.

Of all recording projects undertaken by HABS/HAER this summer, the Isle Royale Lights were probably the most remote, and the most difficult to organize logistical-

ly. Located 50 miles north of the northern shore of Michigan's Upper Peninsula, the park is physically closer to the Canadian shore of Lake Superior, only 15 miles away. This project was also initiated by Ketterson and Kenkel.

Arrangements for housing, studio space and transportation to the two lights had to be made well in advance of the project start date, June 8. Studio space was found at a high school in Houghton, MI, location of the park's winter and mainland headquarters. The four-member team lead by Alabama architect Judith Collins set up portable drafting boards in the lighthouses to pro-



East elevation, Rock Harbor Lighthouse, Isle Royale National Park. Delineated by David E. Naill and Michael A. Kraeling, 1992, HABS.

duce some of the preliminary drawings. Although an apartment housed the team for much of the 12-week project, on-site accommodations were necessarily spartan; while measuring Passage Island Light—located six miles from summer headquarters at Mott Island—the team lived and worked in the keeper's house, enduring fog, storms and sub-freezing temperatures. While measuring Rock Harbor Light, the team occupied seasonal employee dormitory space at Mott Island when it was available. The purchase and transport of food and other supplies had to be planned one to two weeks in advance.

Transportation from Houghton to Isle Royale was accomplished either by boat (73 miles, 6 hours one way)

or seaplane (45 minutes). Transportation among the sites was provided by Park Service personnel using smaller boats. Because Park Service personnel were often on duty at various locations, these arrangements also had to be made in advance, usually by two-way radio. The capricious weather of Lake Superior was the ultimate scheduler: high winds and dangerous waves automatically delayed or canceled trips among the islands.

There are several facets to the cultural history of Isle Royale National Park, which comprehensive HABS documentation plans to address over two to three more summers. Documentation of the lights (of which there are four) will aid in their restoration and maintenance, perhaps leading to their eventual use as interpretive sites for the lives of lightkeepers and their families, Great Lakes ore and passenger shipping, the past and present role of the Coast Guard, and the evolution of disaster prevention and rescue methods—as demonstrated by the replacement of the Fresnel lenses by solar and battery powered lights and fog signals. HABS hopes to record Edison Fishery near Rock Harbor Light, which represents the small-scale 19th- and 20th-century commercial fishing industry; and Rock Harbor Lodge, the destination of many tourists over the last 100 years.

By using summer hires to work in the fields of architecture and architectural history, HABS affords them numerous opportunities to broaden their knowledge of these and other disciplines. The Melrose team was immersed in the culture of the South, having daily opportunities to sketch, photograph and study at close range many fine examples of Greek Revival architecture. On weekends, the vernacular architecture of rural Mississippi and Louisiana, the many high styles of Port Gibson on the Natchez Trace and New Orleans were within driving range. The Harry S Truman team was able to investigate the many fine examples of both 19th- and 20th century architecture in Kansas City, St. Louis and Chicago.

Because the study of architecture focuses on the built environment, the previous work and study experience of most HABS interns is overwhelmingly urban. By contrast, the team at Petrified Forest worked and traveled in sparsely populated northeast Arizona, a region peopled primarily by Navajo, Hopi and Apache communities. Through visits to Mesa Verde National Park, Acoma Pueblo and Santa Fe, for example, they became acquainted with the architecture of both the Anasazi and modern day Native Americans, Spanish, Mexican and "Anglo" colonists and their imitators. The Isle Royale team was exposed to what might be termed the "quintessential national park experience." Their work environment was wilderness, resulting in a constant awareness of fauna and flora, weather and terrain. They acquired an appreciation for the work of the more traditional NPS, and a greater understanding for man's response to the difficulties of working and living in a relatively harsh and unpredictable climate.

Joseph D. Balachowski is an architect with HABS; he has field supervised and managed numerous NPS and private sector projects, and is currently rewriting the *Handbook for Recording Structures with Measured Drawings*.